

Sent on behalf of Michael Reynolds and Robert Bornstein

UAO/DTRA Workshop -- Madison Square Garden 2004 & 2005

Where: NASA Goddard Institute of Space Sciences (GISS)

2880 Broadway, New York City (at Columbia University)

When: 23-24 February, 2004

Sponsored by:

NASA Goddard Institute of Space Sciences (GISS)

Defense Threat Reduction Agency (DTRA)

Brookhaven National Laboratory (BNL)

Dear Urban Scientists,

This memo is an announcement for a workshop to design a study of atmospheric transport and diffusion in midtown New York City. We will be conducting a Perfluorocarbon Tracer (PFT) release in the vicinity of Madison Square Garden, probably in June of this year. This pilot study has been funded by Defense Threat Reduction Agency (DTRA) and with in-house funds from BNL. Next year we anticipate a much more significant repeat of the same experiment. With your help, we can design a study that will target the most salient T&D issues and can provide the data most needed to support the urbanization of models.

A secondary, but crucial, element of this workshop will be to define the foundation elements of the Urban Atmospheric Observatory (UAO). As we perform intensive studies such as MSG-04, we need to keep in mind the long-term goals of this facility.

A year ago we hosted a workshop in New York City at which we introduced the idea of the Urban Atmospheric Observatory (UAO), a permanent facility in midtown Manhattan. The idea of such an atmospheric testbed was strongly endorsed, and we set out to develop a plan for interagency support and an encompassing scientific scope.

An immediate scientific need is to improve our atmospheric dispersion models so they can be trusted when applied to a city like New York with deep urban canyons. Of paramount importance is the need to provide accurate, real-time information, models and observations, to the NYC Office of Emergency Management (OEM) and this requirement has been central to our thinking.

For the past year we have been very busy with little real reimbursement. We have organized a science team (with Professor Robert Bornstein its head), built and deployed instrumentation, been to countless meetings with city, state, and local government agencies, and visited many scientific and engineering centers in an effort to "see what's out there." It is important to understand the state-of-the-art in everything from meteorological instrumentation to visualization models. Equally important, we want to make use of all existing resources from meteorological stations to radars. Technology abounds. There are many choices now and there will be many in the future as new CBRN sensors are developed, new software is introduced, and new science comes on

line. Only with a testbed facility like UAO can we begin to fully validate and verify these technologies, at least in the megacity environment.

We have contacted most of you on this list. I apologize for a short lead time. Those that have conflicts and can't attend will be missed, but we have had a positive response to this call and expect a very enthusiastic and productive workshop. This will be a working meeting in which we pool our considerable experiences and define both the long-term and immediate plan for UAO in NYC.

If you have not already contacted us, please email Sharon Zuhoski zuhoski@bnl.gov <<mailto:zuhoski@bnl.gov>> that you will attend and if you require hotel reservations (see below). We need to provide a list of attendees to GISS.

Sincerely,
Michael Reynolds, Brookhaven National Laboratory
Robert Bornstein, San Jose State University

Hotel Information

If you would like hotel accommodations we have a block of rooms reserved at the Hotel Beacon. Please email zuhoski@bnl.gov <<mailto:zuhoski@bnl.gov>> the dates of your arrival and departure and a room will be reserved for you. The Hotel Beacon is located at: 2130 Broadway at 75th Street, www.beaconhotel.com <<http://www.beaconhotel.com/>> , 212-787-1100. The room rate is \$130.00/night.